Barbara Mancuso Bouton, and Gary Kubicek, New Riders Publishing, copyright 1998, pages 46-49) ["Bouton"]. For at least the following reasons, Applicant traverses the rejection.

The Examiner's rejection is essentially the same as that given in the Office Action of July 2, 2004. Because the Examiner has not rebutted Applicant's arguments submitted in the response of November 2, 2004, on the merits (relying mostly generalizations of case law), Applicant incorporates the arguments submitted in the filing of November 2.

Specifically, Applicant disagrees with the Examiner's contentions that the "phase control section" of the present invention is disclosed in Sakamoto. The present invention and Sakamoto are quite different in terms of "control of phase" as follows.

The present invention controls a phase between a threshold matrix and multi-tone level image data to which the threshold matrix is applied. In contrast, Sakamoto controls exposure for each pixel according to a displacement between a pixel position on a recording medium and a position within each of the halftone lattices composing the halftone image data (a position on digital data). As apparent from the description, Sakamoto has nothing to do with a relative phase between a threshold matrix and a multi-tone level image data.

In addition, Applicant notes that the Examiner still concedes that "applying threshold matrixes associated with multi-tone level image data representative of monochromatic images excepting said first monochromatic image" as set forth in claim 1 is not disclosed or suggested by Sakamoto, but applies Delabastita to allegedly cure the deficiency. The Examiner contends the following:

> Sakamoto and Delabastita are combinable because they are from the same field of endeavor, namely the reduction and prevention of image artifacts. At the time of the invention, it would have been obvious to a

> person of ordinary skill in the art to **apply a threshold matrix with the phase controlled by said phase control section to the first monochromatic multi-tone image data (such as black), as taught by Sakamoto, and apply threshold matrices to a plurality of associated monochromatic multi-tone image data (such as cyan, magenta, and yellow) with a phase determined on a fixed basis, as taught by Delabastita. The motivation for doing so would have been that each color component must be properly positioned relative to the other color components in order to print correctly** (column 1, lines 24-32 of Delabastita). Therefore, if the phase is specifically controlled for one color, the phase associated with the other colors must be fixed based on that controlled phase value. Therefore, it would have been obvious to combine Delabastita with Sakamoto.

Final Office Action at page 10. Bold and underline added for emphasis.

Applicant submits that combining the references as suggested by the Examiner would produce a product that is inoperable.

Sakamoto discloses a method of preventing fluctuations in size and shape which occur when halftone dots from a scanning coordinate system are converted to a recording coordinate system (see Abstract and Summary of the Invention). The method includes the displacement of vertices of a halftone dot to a lattice point on the scanning coordinate system, then correcting an address for a recording pixel based in the displacement, and comparing the corrected address of the recording pixel to the image data to determine if it should be exposed or not (col. 7, lines 14-26). This makes the positional relation between the recording pixels and the screen pattern data approximately constant (col. 7, lines 27-31).

The Examiner contends that "[a] correction in the exact displacement of the halftone coordinates (column 9, lines 26-35 of Sakamoto) is a correction of the phase since the exact alignment of the halftone dot coordinates determines how all of the halftone cells will be aligned in the grid." Final Office Action at pages 2-3. The Examiner then contends that the

displacement of the halftone dots corresponds to the claimed relative phase between said first threshold matrix and said first monochromatic image.

Delabastita discloses a method of improving color fidelity by making the phase of a Rosette pattern on at least one screen dependent on tone (Abstract). Delabastita explicitly discloses that the Rosette pattern of its invention is not based on the spatial oscillations due to the wrong alignment of the screens (col. 4, lines 63-67).

Applicant submits that Sakamoto clearly discloses spatial displacement of halftone dots (which the Examiner concedes) when converting from a scanning coordinate system to the recording coordinate system. Further, the phase shifting of Delabastita does not correspond to displacements of halftone dots with respect a coordinate system, but rather, to a phase of a Rosette pattern.

Therefore, shifting the halftone dots in the black monochromatic image by using a spatial shift as disclosed by Sakamoto and using a Rosette shift on the cyan, yellow and magenta monochromatic images (screens) would produce a color image where the separate color screens that make up the color image are not superimposed properly since the cyan, yellow and magenta screens will be spatially shifted with respect to the black screen. Accordingly, one skilled in the art would not combine the teachings of the references as contended by the Examiner.

The fact that the phase shift in Delabastita may be fixed is irrelevant since it is fixed in relation to a Rosette pattern, not in terms of displacement with respect to coordinate systems. Accordingly, the color image that is produced would be of very poor quality and would also

frustrate the objective of Sakamoto, which is to prevent fluctuations in the size and shape of halftone dots.

In the Response to the Arguments section, the Examiner does not rebut the fact that the halftone dot screens would be spatially displaced, but cites *In re Keller* to generally contend that the Examiner's proposed modifications still would have been obvious to one skilled in the art. Final Office Action at page 3. Applicant submits that the Examiner's reliance on *In re Keller* is misplaced since *Keller* does not stand for the proposition that modifications that would render the prior art inoperable may still be obvious. See *In re Kramer*, 18 USPQ2d 1415 (Fed. Cir. 1991) ("The Board's reliance on Keller is misplaced. It is true that it is the teachings, not the actual physical embodiments, of the references that are considered in making an obvious determination....On the other hand, it is equally true that if the teachings of the prior art reference would lead one skilled in the art to make a modification which would render another prior art device inoperable, then such a modification would generally not be obvious.").

Here, it is clear that the Examiner's suggested modification would have the halftone dots of one color screen spatially displaced with respect to the proper alignment with halftone dots of the other color screens. Accordingly, the combination of at least Sakamoto and Delabastita is not supported in the prior art and the Examiner has failed to make a *prima facie* rejection of claim 1.

Bouton does not cure the above deficiency.

Further, the Examiner concedes that the claimed selection of the phase is not disclosed by Sakamoto in view of Delabastita but applies Bouton to allegedly cure the deficiency. Bouton

discloses the use of slider controls to adjust image properties (page 48), which the Examiner concedes is "clearly operated by a user." Final Office Action at page 17.

Sakamoto discloses a method of preventing fluctuations in size and shape which occur when halftone dots from a scanning coordinate system are converted to a recording coordinate system (see Abstract and Summary of the Invention). The Examiner contends that the displacement of the halftone coordinates corresponds to the claimed phase. Applicant submits that the "phase" in Sakamoto is not user adjustable since the conversion from one coordinate system to the other is fixed based on the equipment (e.g., scanner and recording drum).

The "phase" in Delabastita relates to a Rosette pattern. Delabastita discloses that its "phase" is dependent on the tone (image level) of one of the screens (colors). See Abstract. Accordingly, Applicant submits that the "phase" in Delabastita is also not user adjustable since it fixed based on the image level of the screen. Therefore, contrary to the Examiner's contentions, Sakamoto and Delabastita do not disclose that their respective "phases" can be adjusted.

Therefore, Applicant submits that one skilled in the art would not have modified Sakamoto in view of Delabastita to include a user selectable slider since Sakamoto in view of Delabastita does not disclose or suggest that the phase is user adjustable. Accordingly, modifying Sakamoto in view of Delabastita to include the slider of Bouton is not supported in the prior art, and the Examiner has failed to make a *prima facie* case of obviousness for this additional reason.

The Examiner relies on *In re McLaughlin* to contend that hindsight reasoning was proper since Bouton's sliders were within the level of ordinary skill at the time of the invention. Final Office Action at pages 5-6.

However, Applicant submits that the Examiner's reliance on *McLaughlin* is misplaced since the motivation to modify the teachings of Sakamoto in view of Delabastita is not supported in the prior art for at least the reasons given above. Mere "identification in the prior art of each individual claimed element is insufficient to defeat patentability of the whole claimed invention." *In re Kotzab*, 217 F.3d 1365, 1370 (Fed. Cir. 2000). "[T]o establish obviousness based on a combination of elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant." *Id.*

Here, the Examiner has not provided the motivation or suggestion in the teachings of Sakamoto in view of Delabastita to incorporate the user selectable slider of Bouton. In fact, the teachings of Sakamoto and Delabastita arguably teach away from user selectable adjustments for their respective "phases."

Because claim 10 recites features similar to claim 1 and the Examiner's rejection of claim 10 is similar to that of claim 1, Applicant submits that claim 10 is patentable for at least reasons similar to that given above for claim 1.

Because claims 2-6, 8, 11, 12 and 15 depend on either claim 1 or claim 10, Applicant submits that these claims are patentable at least by virtue of their respective dependencies.

In addition, claim 2 recites that the "phase selection section selects any one of a plurality of phases between a phase in which a Rosette pattern of a clear center ... and a phase in which a Rosette pattern of a dot center." The Examiner concedes that the claimed selection of the Rosette pattern is not disclosed by Sakamoto but applies Delabastita to allegedly cure the deficiency.

The displacement of the halftone coordinates as disclosed in Sakamoto relates to the coordinate conversion between a scanning coordinate system and a recording coordinate system (Abstract and Summary of the Invention). However, "phase" as disclosed by Delabastita relates to a Rosette pattern, which is a circular pattern of halftone dots and can be varied between a dot-centered Rosette and a clear centered Rosette (Figs, 2a-2c).

Accordingly, the Examiner has shifted the definition of the claimed phase from a coordinate shift (claim 1) to a Rosette shift (claim 2). The Examiner concedes that the meaning has shifted, but contends that the "mere fact that the precise types of phase taught in both references have minor variations with respect to one another is immaterial." Final Office Action at page 4.

Applicant submits that the difference in the respective phases is not immaterial since the calculations required to produce the respective phase shifts are different and also the purpose of the respective phase shifts are different, i.e., coordinate shift within a screen vs. a pattern shift within a screen. By conceding that the "precise types of phase" are not the same, the Examiner has admitted that his rejection of at least claim 2 is improper. Accordingly, Applicant requests that the rejection be withdrawn.

The Examiner has rejected claims 7 and 9 under 35 U.S.C. § 103(a) as being unpatentable over Sakamoto in view of Delabastita and Bouton and further in view Usami (US 5,781,709) ["Usami"]. For at least the following reasons, Applicant traverses the rejection.

Because Usami does not cure the deficient teachings given above with respect to claim 1, Applicant submits that claims 7 and 9 are patentable at least by virtue of their dependency on claim 1. In addition, Applicant incorporates the arguments submitted in the filing of November 2.

The Examiner has rejected claim 13 under 35 U.S.C. § 103(a) as being unpatentable over Sakamoto, Delabastita and Bouton and further in view of Williams (US 5,223,953) ["Williams"]. For at least the following reason, Applicant traverses the rejection.

Because Williams does not cure the deficient teachings given above with respect to claim 1, Applicant submits that claim 13 is patentable at least by virtue of its dependency on claim 1.

II. Allowable Subject Matter

Applicant thanks the Examiner for finding allowable subject matter in claim 14 and for indicating that claim 14 would be allowable if rewritten in independent form including all of the limitations of the base claim.

Applicant holds rewriting claim 14 in abeyance until the subject matter regarding claim 1 is resolved.

III. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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